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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,173	06/30/2003	SHI-HSIANG LU	10873-US-PA	1172

31561 7590 04/26/2007

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER
LIANG, REGINA

ART UNIT	PAPER NUMBER
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/604,173	LU ET AL.	
	Examiner	Art Unit	
	Regina Liang	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/13/07 has been entered. Claims 4-15 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 4-8, 10-13, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kihara et al. (US Patent No. 5,889,504).

As to claims 4, 10, Kihara discloses a display driving circuit, comprising: a plurality of driving stages (11-14, Fig. 4), electrically coupled in serial; a plurality of redundant stages (e.g. SR2 and SR4), alternatively disposed between the driving stages (SR1, SR3) and electrically coupled to adjacent driving stages, and each of the redundant stage comprises a conducting path so as to transmit an electric signal from the previous driving stage to the next driving stage, wherein the redundant stage (SR4 of the first stage 11 in Fig. 7) and the driving stage (SR3 of the following stage 11 in Fig. 7) are electrically connected in serial (e.g. when the right SR3 is not

performing the normal shifting operation, on the other hand, the switch circuit 71 controls the transmission gates 72 and 73 so that the gate 72 is turned off while the gate 73 is turned on. As a result, the data signal from **the right redundant register SR4** is supplied via the transmission gate 73 **to the right normal register SR3** and the right redundant register SR4 of the shift register group 11 of the next stage, see col. 9, lines 19-27); the redundant stage is the driving stage (redundant shift register is a driving stage) installed with a redundant device (e.g., SR4 in Fig. 7); and a plurality of driving lines, wherein each of the driving lines (e.g. the column line 1 to each pixel cell) corresponds to one of the driving stages or the redundant stages respectively, and each of the driving line is electrically coupled to an output terminal of a corresponding driving stage or a corresponding redundant stage (e.g. when the normal shift register is broken)..

As to claims 5, 11, Kihara discloses each of the redundant stage (e.g. RB3, Fig. 4) includes a driving stage (SR1, SR3) and a redundant device (SR2, SR4).

As to claim 6, Kihara discloses each pair of two adjacent redundant stages (e.g. two adjacent SR4s) further comprises at least one another driving stage (SR3) electrically coupled there between.

As to claims 7, 12, Kihara discloses the redundant device comprises a plurality of transistors (72, 73, Fig. 7) in the driving stage.

As to claims 8, 13, Kihara discloses the redundant device is capable of supplying an extra conducting path to transmit an electrical signal from the previous driving stage to the next driving stage via the current redundant stage while the original conducting path in the corresponding path in the corresponding driving stage of the redundant stage is broken (col. 9, lines 3-36).

As to claim 15, Kihara discloses the driving stage group includes N number of t a plurality of driving stages, and the redundant stage is electrically connected subsequent to the driving stage group (see Figs. 4 and 7).

Claim Rejections - 35 USC § 103

4. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kihara et al. (US Patent No. 5,889,504).

As to claims 9 and 14, Kihara shows four transistors (72, 73) and a switching circuit (71 and a plurality of invertors in the driving stage. Kihara does not specifically discloses that there are total six transistors in the driving stage. However, it would have been obvious to one of ordinary skill in the to have realized that more than four transistors could be integrated into the driving stage since the switch circuit or the invertors could also include transistors.

Response to Arguments

5. Applicant's arguments filed 2/13/07 have been fully considered but they are not persuasive.

Applicant's remarks on pages 6-7 regarding "the redundant stage is the driving stage installed with a redundant device" are not persuasive since applicant is reading limitation into the claims. Figs. 4 and 7 of Kihara teaches each shift register groups (11-14) having redundant shift registers, the redundant shift register is performing a driving operation when the right normal shift register is not performing the normal shifting operation, thus, the right redundant shift

register SR4 in Fig. 7 reads on "the redundant stage is a driving stage installed with a redundant device" as claimed. The claims do not preclude having S1 as in Kihara reference.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Regina Liang
Primary Examiner
Art Unit 2674

4/24/07